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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,073	07/17/2001	Antonio Mugica	38146	2280
29569	7590	11/24/2004	EXAMINER	
JEFFREY FURR 253 N. MAIN STREET JOHNSTOWN, OH 43031				QURESHI, AFSAR M
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/682,073	MUGICA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Afsar M Qureshi	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 9-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment*

1. Responsive to amendment, received on August 11, 2004, claims 1-8 cancelled.  
New claims 9-14 added, as requested.

### *Claim Objections*

2. Claims 9 objected to because of the following informalities:
  - In claim 9, line 7, after "iii) data.", it appears that a 'period' is used to end the sentence, however, claim continues to sections " c)" and a 'comma' should have been used instead of 'period'. (See 37 CFR 1.77 (b) for guidelines.)
  - Similarly, in claim 9, line 23, it appears that a 'period' is used to end the sentence instead of a 'comma'.
  - In claim 9, line 22, the subsections " l and m)" are used twice, first in lines 19 and 20, and again in line 22 and 24 of the same claim.
  - In subsection "s)", line 34 of claim 9, "**address's** subnetwork" is incorrect.

The Examiner believes these may be typographical errors. Appropriate corrections are required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: additional steps for broadcasting packets to nodes in a subnetwork.

It appears that the Applicant forgot to include steps (k), (l) and (m) from cancelled claim 4 after the preamble of the claim 11.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 9, 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Perkins et al. ('Perkins' hereinafter) US 5, 442,633.

Claim 9. Perkins discloses method for encapsulation and decapsulation source routing for mobile host in hybrid distributed network comprising:

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- a) Mobile host MH 10 originating a packet (originating a packet at a source node)  
see fig. 2, col. 4, lines 36-44.
- b) Packet having an Internet IP **header** Loose Source Record Route (network path) and **data** segment (packet consists of header, a network path, and data) see figs. 3A, 3B, col. 6, lines 47-61.
- c) Encapsulating the packet using ETHERNET, X.25 or Protocols (encapsulating the packet in protocol-specific subnetwork) see fig. 1, col. 1, lines 27-30.
- d) Sending the packet to a base station BAS 12 (passing the protocol-specific packet to the first destination router in the network path) see fig. 2.
- e) Sending the packet to a base station BAS 12 (passing the protocol-specific packet to the first destination router in the network path) see fig. 2.
- f) The base station advances a pointer that is pointing to the next address in the Loose Source Record Route (incrementing the path destination under counter by one)  
see fig. 5, Block F, col. 10, lines 14-17.
- g) The base station forwards the packets to the next address (using next path destination address, encapsulating the packet, and passing the packet to the next router) see fig. 5, Block G, col. 10, lines 14-17.
- h, i, j) The local gateway 16 forwards the packet to the router MR 20 and beyond until it reaches another base station BS 12 on the other side (i.e., repeating the previous five steps until the packet reaches the final destination) see fig. 2.

k, l, m) Perkins further discloses the method comprising the additional steps of:

- Encapsulating the broadcast packet in a level 2 LAN 14 subnetwork (encapsulating the broadcast packet in a protocol-specific packet used the destination subnetwork); see fig. 2, and Col. 4, lines 36-44.
- Passing the broadcast packet to the base stations BAS 12s (passing the broadcast packet to the nodes on the destination subnetwork); see fig. 2. Wherein identifying the packet as a broadcast packet is inherent.

n through u) In addition to disclosing the steps (b) to (h) as discussed in the rejection of claim 1 above, Perkins discloses the acknowledgment packet utilizing the reversed source route in the ROUTE DATA in the received packet for returning the reply. See col. 8, lines 44-53.

Claim 12. Perkins further discloses that IP packet contains TYPE OF SERVICE (Packet type and Quality of Service) IDENTIFICATION (Packet ID) LENGTH (Network path length), IHL (Data Pointer), ROUTE DATA (Network Path Pointer Table) and POINTER (Network Path Destination Index and Multicast Pointer) fields. See figs. 3A and 3B.

Claim 13. Perkins discloses the Route Data contains Internet 32-bit IP address (Network Path § contains network type and network address). See col. 7, lines 3-5.

Claim 14. Perkins further discloses that the length of data section is TOTAL

LENGTH minus IHL (Data Length) and one data segment, which is not shown, but is known and old in the art. See fig. 3A, Data Segment.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Pitt et al. ('Pitt' hereinafter) US 5,280,480.

Perkins does not specifically disclose that the subnet encapsulation packet has a header containing a destination address, as claimed herein.

Pitt discloses a destination address DA containing in the MAC ADDRESS FIELDS of a subnet frame (encapsulation packet has an encapsulation header that contains a destination address). See fig. 8A, col. 5, lines 27-30.

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention, to be able to incorporate a destination field, as taught by Pitt, col. 5, lines 23-26, within the encapsulation header of the subnet packet in order to enable

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any router connected to the subnet so that it can used to forward the packet to its next destination.

#### ***Response to Arguments***

6. Applicant's arguments filed August 11, 2004 have been fully considered but they are moot in view of cancelled claims 1-8. However, the Applicant maintained same subject matter in the new claims 9-14 but no arguments in respect to the cited art were presented. The Examiner contends that the cited art teaches all the limitations as claimed in claims 9-14. The previous rejection applies to the new claims 9-14 as discussed above.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M Qureshi whose telephone number is (571) 272 3178. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272 3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**AFSAR QURESHI  
PATENT EXAMINER**  
November 22, 2004